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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,288	07/18/2003	Josef Theurer	THEURER-126	4603

7590 06/21/2006

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EXAMINER	
LOWE, MICHAEL S	

ART UNIT	PAPER NUMBER
3652	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/622,288	THEURER, JOSEF	
	Examiner	Art Unit	
	M. Scott Lowe	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new limitations "completely and uniformly filling" and "measuring...along the entire length thereof" are new matter not found in the application as originally filed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as anticipated by Theurer (US 4,576,538).

Re claim 1, Theurer teaches a method of loading several like storage cars 4 with bulk material, the storage cars 4 being coupled together to form a freight train 1, and

each storage car 4 comprising a bottom conveyor band (17 or 53,54) for conveying the bulk material in a conveying direction to a transfer conveyor band (17 or 53,54) projecting from a front end of the storage car, the bulk material being conveyed at a conveying speed mode from a bulk material delivery point by the bottom and transfer conveyor bands arranged successively in the conveying direction, comprising the steps of

(a) first completely and uniformly (column 2, line 19) filling a first one of the storage cars 4 with the bulk material by reducing the conveying speed mode of the bottom conveyor band in the first storage car to a bulk material storing speed mode while the transfer conveyor band of the adjacent storage car fills the first storage car, measuring the amount of the bulk material accumulating in a pile in the first storage car along the entire length thereof (if it is completely and uniformly filled then it must include the entire length, and automatically adjusting the storing speed mode of the bottom conveyor band (17 or 53,54) the first storage car being automatically adjusted in response to a measured amount of the bulk material accumulating in the pile so that the first storage car is filled to a maximal height, and

(b) after the accumulated pile of bulk material in the first storage car has reached a forward end position, automatically reducing the conveying speed mode of the bottom conveyor band in the storage car adjacent to, and rearwardly of, the first storage car in the conveying direction to the storing speed mode.

Re claim 2, Theurer teaches emptying bulk material on the transfer conveyor band (17 or 53,54) in the adjacent storage car 4 into the first storage car 4 while the

conveying speed mode of the bottom conveyor band in the adjacent storage car 4 is reduced to the storing speed mode.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theurer (US 4,576,538) in view of Theurer (EP 0429713B1).

Re claims 1,2, although it is believed that Theurer '538 teaches measuring the amount of the accumulating pile of bulk material by sensing of the height of the pile, in the event that a convincing argument overcomes the above rejection over Theurer '538 alone, the following obviousness rejection applies:

Theurer '713 teaches ("Description of Prior Art" of current application) measuring the amount of the accumulating pile of bulk material by sensing of the height of the pile to protect the safety of the operator (Theurer '713, page 2, paragraph 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Theurer '538 by the general teaching of Theurer '713 to measure the amount of the accumulating pile of bulk material by a sensing of the height of the pile to

make sure the pile does not overflow the car and also to protect the safety of the operator.

Re claim 3, Theurer '538 does not teach sensing the height of the pile by contactless sensing of the height of the pile. Theurer '713 teaches ("Description of Prior Art" of current application) measuring the amount of the accumulating pile of bulk material by a contactless sensing of the height of the pile to protect the safety of the operator (Theurer '713, page 2, paragraph 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Theurer '538 by the general teaching of Theurer '713 to measure the amount of the accumulating pile of bulk material by a contactless sensing of the height of the pile to make sure the pile does not overflow the car.

Re claim 4, Theurer '538 does not teach sensing the forward end position of the pile of bulk material. Theurer '713 teaches ("Description of Prior Art" of current application) sensing the forward end position of the pile of bulk material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Theurer '538 by the general teaching of Theurer '713 to sense the forward end position of the pile of bulk material to make sure the pile does not overflow the car.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theurer (EP 0429713B1) in view of Theurer (US 4,576,538).

Re claim 1, Theurer '713 teaches a method of loading several like storage cars 4 with bulk material, the storage cars 2 being coupled together to form a freight train 1, and each storage car 2 comprising a bottom conveyor band (6,7,9,11,etc.) for conveying the bulk material in a conveying direction to a transfer conveyor band (6,7,9,11,etc.) projecting from a front end of the storage car, the bulk material being conveyed at a conveying speed mode from a bulk material delivery point by the bottom and transfer conveyor bands arranged successively in the conveying direction, comprising the steps of

(a) first filling a first one of the storage cars 2 with the bulk material by reducing the conveying speed mode of the bottom conveyor band in the first storage car to a bulk material storing speed mode while the transfer conveyor band of the adjacent storage car fills the first storage car, measuring the amount of the bulk material accumulating in a pile in the first storage car, and automatically adjusting the storing speed mode of the bottom conveyor band (6,7,9,11,etc.) the first storage car being automatically adjusted in response to a measured amount of the bulk material accumulating in the pile so that the first storage car is filled to a maximal height, and

(b) after the accumulated pile of bulk material in the first storage car has reached a forward end position, automatically reducing the conveying speed mode of the bottom conveyor band in the storage car adjacent to, and rearwardly of, the first storage car in the conveying direction to the storing speed mode.

Theurer '713 is silent on completely and uniformly filling storage cars. Theurer '538 teaches completely and uniformly (column 2, line 19) filling a first one of the

storage cars as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Theurer '713 by Theurer '538 to have completely and uniformly filling a first one of the storage cars as claimed in order to get the most use out of the available space (increase efficiency).

Re claim 2, Theurer '713 teaches (page 4) emptying bulk material on the transfer conveyor band (6,7,9,11,etc.) in the adjacent storage car 2 into the first storage car 2 while the conveying speed mode of the bottom conveyor band in the adjacent storage car 2 is reduced to the storing speed mode.

Re claim 3, Theurer '713 teaches (page 4) measuring the amount of the accumulating pile of bulk material by a contactless sensing 10 of the height of the pile to protect the safety of the operator (page 2, paragraph 5).

Re claim 4, Theurer '713 teaches (page 4) sensing 10 the forward end position of the pile of bulk material.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Theurer (EP 0429713B1) in view of Theurer (US 4,576,538) as applied in claim 1, and further in view of Snead (US 5,029,532).

Re claim 5, Theurer '713 teaches remote control but is silent as to a display. Snead teaches use of interactive remote controls that are wireless (radio) with a display to allow a remote operator to safely view the state of the system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Theurer '713 by the general teaching of Snead to wirelessly transmit the

loading condition of the storage car being filled with the bulk material to a display of a control device controlling the speed of the conveyor bands in order to allow a remote operator to safely view the state of the system.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Theurer (US 4,576,538) in view of Snead (US 5,029,532), or in the alternative, as obvious over Theurer (US 4,576,538) in view of Theurer (EP 0429713B1) as applied in claim 1 and further in view of Snead (US 5,029,532).

Re claim 5, Theurer teaches remote control but is silent as to a display. Snead teaches use of interactive remote controls that are wireless (radio) with a display to allow a remote operator to safely view the state of the system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Theurer by the general teaching of Snead to wirelessly transmit the loading condition of the storage car being filled with the bulk material to a display of a control device controlling the speed of the conveyor bands in order to allow a remote operator to safely view the state of the system.

Conclusion

Applicant's arguments filed 3/6/06 have been fully considered but they are not persuasive.

Applicant argued that Theurer '713 does not teach measuring the amount of bulk material along the entire length of the storage car and that there is no teaching of

completely and uniformly filling the car. Firstly, as seen in the above 112 rejection these new limitations are not supported by the specification. For sake of examination these limitations were viewed with respect to the prior art, but it is pointed out that some of the rejections would be 102 rejections under Theurer '713 without the new matter limitations.

Nonetheless, Theurer '713 teaches measuring the amount of bulk material along the entire length of the storage car in column 3 with contact switches and time delays and in column 4 using optical sensors for a completely automatic filling of the car (column 3). Certainly if the car is sensed to be filled then the amount of bulk material along the entire length of the storage car has been measured. As shown in the above rejections Theurer '538 has been added to further reinforce the teaching of measuring the amount of bulk material along the entire length of the storage car and also to teach completely and uniformly filling the car. The arguments by applicant about height of the material and sensors do not change that Theurer '713 teaches there is completely automatic filling and the Theurer '538 completely and uniformly filling the car which is yet another showing of measuring.

Applicant argued that the storing speed of the bottom conveyor is not automatically adjusted and that "automatically adjusting" and "switching off" are different. Theurer '713 in column 5-6 does teach both automatically switching off and automatically switching from a fast to slower speed. Both of these teach the limitation of automatic adjustment, as there is nothing limiting away from stopping being a type of adjustment.

Applicant argued that Theurer '713 does not teach item (b) of claim 1 because the bulk material reaches the forward end position only after the time delay. However, the reference actually states the time delay occurs after, not before, the bulk material reaches the forward end position and sets off sensor 10 (columns 6-7).

Applicant argued that Theurer '538 does not teach reducing the conveying speed to a storage speed, however this is taught in column 5, lines 37-38 of Theurer '538 and on page 4, of Theurer '713.

Applicant argues that Theurer '538 does not measure the amount of material. However, since Theurer states that when it is sensed the car is filled completely and uniformly, and then the drives are shut off, Theurer has in fact measured the amount of material accumulated.

Applicant argues that Theurer does not teach automatically adjusting the storing speed mode, however this is clearly taught in column 2, line 15 and column 5, lines 37-38 of Theurer '538 and on page 4, of Theurer '713.

Applicant argues that Theurer does not teach emptying the bulk material on the transfer conveyor band of the adjacent storage car into the first storage car. However this is taught, at the least, in figures 1,2,4-6 as well as column 5, lines 57-60 of Theurer '538 and on page 4, of Theurer '713.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msl

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